

Title (en)
SLOTTED CONFIGURATION FOR OPTIMIZED PLACEMENT OF MICRO-COMPONENTS USING ADHESIVE BONDING

Title (de)
KONFIGURATION MIT SCHLITZEN ZUR OPTIMIERTEN AUFNAHME VON MIKROKOMPONENTEN DURCH HAFTBINDUNG

Title (fr)
CONFIGURATION À FENTES PERMETTANT UN PLACEMENT OPTIMISÉ DE MICROCOMPOSANTS À L'AIDE D'UNE LIAISON ADHÉSIVE

Publication
EP 2507830 A4 20180110 (EN)

Application
EP 10834989 A 20101130

Priority

- US 95501110 A 20101129
- US 26545909 P 20091201
- US 2010058278 W 20101130

Abstract (en)
[origin: US2011127633A1] An arrangement for improving adhesive attachment of micro-components in an assembly utilizes a plurality of parallel-disposed slots formed in the top surface of the substrate used to support the micro-components. The slots are used to control the flow and "shape" of an adhesive "dot" so as to quickly and accurately attach a micro-component to the surface of a substrate. The slots are formed (preferably, etched) in the surface of the substrate in a manner that lends itself to reproducible accuracy from one substrate to another. Other slots ("channels") may be formed in conjunction with the bonding slots so that extraneous adhesive material will flow into these channels and not spread into unwanted areas.

IPC 8 full level
H01L 23/48 (2006.01); **G02B 6/42** (2006.01); **G02B 7/00** (2006.01); **G02B 7/02** (2006.01); **H01L 23/00** (2006.01); **H01L 23/34** (2006.01)

CPC (source: CN EP US)
G02B 6/4228 (2013.01 - CN EP US); **G02B 6/4239** (2013.01 - EP US); **G02B 7/003** (2013.01 - US); **G02B 7/025** (2013.01 - US); **H01L 23/544** (2013.01 - US); **H01L 24/83** (2013.01 - CN EP US); **H01L 23/345** (2013.01 - CN EP US); **H01L 24/29** (2013.01 - CN EP US); **H01L 24/32** (2013.01 - CN EP US); **H01L 2223/54426** (2013.01 - US); **H01L 2224/26175** (2013.01 - CN EP US); **H01L 2224/2919** (2013.01 - CN EP US); **H01L 2224/32225** (2013.01 - CN EP US); **H01L 2224/83121** (2013.01 - CN EP US); **H01L 2224/83143** (2013.01 - CN EP US); **H01L 2224/83192** (2013.01 - CN EP US); **H01L 2224/83234** (2013.01 - CN EP US); **H01L 2224/83385** (2013.01 - CN EP US); **H01L 2224/83862** (2013.01 - CN EP US); **H01L 2924/14** (2013.01 - EP US); **Y10T 428/24479** (2015.01 - EP US)

Citation (search report)

- [XII] EP 1143519 A2 20011010 - LUCENT TECHNOLOGIES INC [US]
- [XII] US 5789278 A 19980804 - AKRAM SALMAN [US], et al
- [XPI] US 2010072555 A1 20100325 - MENG GUANGQING [US], et al
- [XII] US 2006084254 A1 20060420 - ATTARWALA ABBAS I [US]
- [A] US 2002115200 A1 20020822 - ZOU QUANBO [SG], et al
- [A] US 7447395 B2 20081104 - MONTGOMERY ROBERT KEITH [US], et al
- [A] WO 2004081629 A1 20040923 - BOOKHAM TECHNOLOGY PLC [GB], et al
- [A] GB 2370012 A 20020619 - IBM [US]
- [A] GB 2310052 A 19970813 - NORTHERN TELECOM LTD [CA]
- See references of WO 2011068777A2

Cited by
EP4016149A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2011127633 A1 20110602; US 8836100 B2 20140916; BR 112012012778 A2 20171212; BR 112012012778 A8 20180508; CN 102714199 A 20121003; CN 102714199 B 20150318; CN 104614819 A 20150513; CN 104614819 B 20171031; EP 2507830 A2 20121010; EP 2507830 A4 20180110; EP 2507830 B1 20210421; US 10175448 B2 20190108; US 2014362457 A1 20141211; WO 2011068777 A2 20110609; WO 2011068777 A3 20110922

DOCDB simple family (application)
US 95501110 A 20101129; BR 112012012778 A 20101130; CN 201080053263 A 20101130; CN 201510046559 A 20101130; EP 10834989 A 20101130; US 2010058278 W 20101130; US 201414331315 A 20140715